

What is claimed is:

1. A computer-implemented system for building a database of bales of cotton available for sale, comprising:
 - a database storage device connected to a communications network for storing a database of bale identifications and associated fiber quality data; and
 - a fiber quality measurement instrument located in a cotton gin for providing fiber quality data substantially concurrently with the making up of cotton into individual bales, and connected to said communications network for uploading to said database storage device.
2. The system of claim 1, which further comprises at least one ginning process parameter measurement instrument located in the cotton gin, and wherein the database further stores associated ginning process parameter data.
3. The system of claim 1, wherein said fiber quality measurement instrument measures one or more of micronaire, length, strength, color and trash.
4. The system of claim 1, wherein said fiber quality measurement instrument measures one or more of micronaire, length, strength, color, trash, moisture content, nep content, maturity, fineness and stickiness.
5. The system of claim 1, wherein said fiber quality measurement instrument acquires images of samples of cotton fiber from individual bales for uploading to said database storage device.

6. The system of claim 3, wherein said fiber quality measurement instrument acquires images of samples of cotton fiber from individual bales for uploading to said database storage device.

7. The system of claim 4, wherein said fiber quality measurement instrument acquires images of samples of cotton fiber from individual bales for uploading to said database storage device.

8. The system of claim 2, wherein the at least one ginning process parameter measurement instrument measures one or more of critical temperatures, process throughput, number and type of seed cotton, number and type of lint cleaners, seed cotton moisture content, and lint moisture content.

9. A computer-implemented system for electronic commerce of bales of cotton, comprising:

a database storage device connected to a communications network for storing a database of bale identifications and associated fiber quality data;

a fiber quality measurement instrument located in a cotton gin for providing fiber quality data substantially concurrently with the making up of cotton into individual bales, and connected to said communications network for uploading to said database storage device; and

a search engine connected via said communications network to interrogate the database to select bales having fiber qualities within specified ranges for a candidate buyer.

10. The system of claim 9, which further comprises at least one ginning process parameter measurement instrument

located in the cotton gin, and wherein the database further stores associated ginning process parameter data.

11. The system of claim 9, which further comprises an action engine that estimates the landed cost of fiber in bales selected by said search engine and initiates a buy action for an actual buyer.

12. The system of claim 11, which further comprises a transportation and storage system for transporting and storing individual bales of cotton after they are made up for optimized delivery to the actual buyer.

13. The system of claim 9, wherein said fiber quality measurement instrument measures one or more of micronaire, length, strength, color and trash.

14. The system of claim 9, wherein said fiber quality measurement instrument measures one or more of micronaire, length, strength, color, trash, moisture content, nep content, maturity, fineness and stickiness.

15. The system of claim 9, wherein said fiber quality measurement instrument acquires images of samples of cotton fiber from individual bales for uploading to said database storage device.

16. The system of claim 13, wherein said fiber quality measurement instrument acquires images of samples of cotton fiber from individual bales for uploading to said database storage device.

17. The system of claim 14, wherein said fiber quality measurement instrument acquires images of samples of cotton fiber from individual bales for uploading to said database storage device.

18. The system of claim 10, wherein the at least one ginning process parameter measurement instrument measures one or more of critical temperatures, process throughput, number and type of seed cotton, number and type of lint cleaners, seed cotton moisture content, and lint moisture content.

19. A computer-implemented method for building a database of bales of cotton available for sale, comprising the steps of:

employing a fiber quality measurement instrument located in a cotton gin to provide fiber quality data substantially concurrently with the making up of cotton into individual bales; and

transmitting the fiber quality data via a communications network to a database storage device that stores a database of bale identifications and associated fiber quality data.

20. The method of claim 19, which further comprises employing at least one ginning process parameter measurement instrument located in the cotton gin to provide ginning process parameter data, and transmitting the ginning process parameter data via the communications network to the database storage device, the database storage device storing associated ginning process parameter data with bale identifications.

21. The method of claim 19, wherein said step of employing a fiber quality measurement instrument comprises

employing an instrument that measures one or more of micronaire, length, strength, color and trash.

22. The method of claim 19, wherein said step of employing a fiber quality measurement instrument comprises employing an instrument that measures one or more of micronaire, length, strength, color, trash, moisture content, nep content, maturity, fineness and stickiness.

23. The method of claim 19, which further comprises acquiring images of samples of cotton fiber from individual bales, and digitally transmitting the images to the database storage device.

24. The method of claim 21, which further comprises acquiring images of samples of cotton fiber from individual bales, and digitally transmitting the images to the database storage device.

25. The method of claim 22, which further comprises acquiring images of samples of cotton fiber from individual bales, and digitally transmitting the images to the database storage device.

26. The method of claim 20, wherein the ginning process parameter data includes one or more of critical temperatures, process throughput, number and type of seed cotton, number and type of lint cleaners, seed cotton moisture content, and lint moisture content.

27. A computer-implemented method for electronic commerce of bales of cotton, comprising the steps of:

employing a fiber quality measurement instrument located in a cotton gin to provide fiber quality data substantially concurrently with the making up of cotton into individual bales;

transmitting the fiber quality data via a communications network to a database storage device that stores a database of bale identifications and associated fiber quality data; and

employing a search engine connected via the communications network to interrogate the database to select bales having fiber qualities within specified ranges for a candidate buyer.

28. The method of claim 27, which further comprises employing at least one ginning process parameter measurement instrument located in the cotton gin to provide ginning process parameter data, and transmitting the ginning process parameter data via the communications network to the database storage device, the database storage device storing associated ginning process parameter data with bale identifications.

29. The method of claim 27, which further comprises employing an action engine that estimates the landed cost of fibers in bales selected by the search engine and initiates a buy action for an actual buyer.

30. The method of claim 29, which further comprises transporting and storing individual bales of cotton after they are made up for optimized delivery to the actual buyer.

31. The method of claim 27, wherein said step of employing a fiber quality measurement instrument comprises

employing an instrument that measures one or more of micronaire, length, strength, color and trash.

32. The method of claim 27, wherein said step of employing a fiber quality measurement instrument comprises employing an instrument that measures one or more of micronaire, length, strength, color, trash, moisture content, nep content, maturity, fineness and stickiness.

33. The method of claim 27, which further comprises acquiring images of samples of cotton fiber from individual bales, and digitally transmitting the images to the database storage device.

34. The method of claim 31, which further comprises acquiring images of samples of cotton fiber from individual bales, and digitally transmitting the images to the database storage device.

35. The method of claim 32, which further comprises acquiring images of samples of cotton fiber from individual bales, and digitally transmitting the images to the database storage device.

36. The method of claim 28, wherein the ginning process parameter data includes one or more of critical temperatures, process throughput, number and type of seed cotton, number and type of lint cleaners, seed cotton moisture content, and lint moisture content.